

HTIS



Hazardous Technical Information Services
BULLETIN

VOL. 16 NO. 4

JUL- AUG 2006

In This Issue

First Printer for New Hazardous Waste Manifests Approved

e-Cycling a New Path for Electronics

EPA Establishes a New Voluntary Standard for Computer Buyers

SAICM Adopted

Sealift Cargo Industry's Primary Issues of Concern

MSHA Publishes Final Rule on Diesel Particulate Matter

DOT's PHMSA Harmonizes US Infectious Substances Rules with UN Recommendations

EPA High Production Volume Chemicals Information System

EPA Releases Handbook for Drinking Water Security Systems' First Responders

EPA Finalizes RCRA Burden Reduction Initiatives

OSHA's Best Practices Guide to Developing Workplace First-Aid Programs

NEHC-TM-OEM 6260-01A

IRRATA

Regulatory Changes Requested on Pest Strip and other DDVP Products

By Muhammad Hanif,
Chemist, HTIS

The Environmental Protection Agency (EPA) announced on Tuesday, May 16, 2006, that the Newport Beach, California-based Amvac Chemical Corporation volunteered to cancel some uses and add restrictions to others for a pesticide known as DDVP (dichlorvos; or 2,2-dichlorovinyl dimethyl phosphate). Dimethyl 2,2-dichlorovinyl phosphate (dichlorvos) is an organophosphate insecticide widely used in the United States to kill mosquitoes, fleas and other insects in households and businesses. The EPA has tentatively agreed to new restrictions that will allow the company to keep this controversial insecticide on the market.

As a result of the EPA's evaluation, to ensure that all pesticides meet current health and safety standards, the manufacturer of insect pest strips containing the organophosphate pesticide DDVP (or dichlorvos) has asked the EPA to remove certain uses and further restrict where the pest strips can be used in homes. In the United States (U.S.), the following DDVP strips sizes are most commonly used:

"Large"

100-gram (size will no longer be available- see timeline below)

80-gram

65-gram

"Small"

21-gram (size will no longer be available – see timeline below)

16-gram new (size to be available)

10.5-gram

5.25-gram

DDVP is listed by California as a known carcinogen and is part of a class of chemicals that has been linked to developmental damage in

The HTIS Bulletin is designed to keep DOD personnel informed of technical and regulatory developments on the environmentally safe management of hazardous materials and wastes. For technical inquiries, call **DSN 695.5168** or commercial **804.279.5168** or toll free **800. 848.4847**

children. Exposure to DDVP can cause flu-like symptoms, including headaches, nausea and vomiting. In large doses, the chemical is fatal.

In 1955, the initial use of DDVP was as a concentrated liquid. It is commonly used both professionally and in homes and gardens in a number of areas as listed below:

- In agriculture and horticulture it is used: in mushroom houses against mushroom flies; against various insects and beetles in poultry houses; and on protected ornamentals, protected vegetables and herbs and brassica seedlings;
- As a veterinary medicine, in protecting farmed salmon against salmon lice; and as an aerosol against cat and dog fleas;
- In public hygiene as an aerosol insecticide and space spray.
- In some developing countries as an insecticide on vegetables, deciduous fruits, rice and plantation crops such as cotton, coffee, tea, cacao, banana, tobacco and spices.

The request from the manufacturer would remove the largest pest strip use (100 grams) from the registration, and have new restrictions added to product labels for all remaining sizes. Specifically, the larger strips could not be used in homes except in garages, attics, crawl spaces, and sheds that are occupied for less than four hours per day.

Consistent with label directions, the large pest strips can continue to be used in boathouses, museum collections, animal buildings, milk rooms or enclosed areas occupied by people for less than four hours per day. The large strips can also be used in unoccupied structures provided they are unoccupied for more than four months immediately following placement of a pest strip.

For the smaller pest strips (16, 10.5, and 5.25 g), use in the home would be limited to closets, wardrobes, and cupboards. The manufacturer will stop making the 21-gram closet strip and replace it with a 16-gram strip reformulated with less active ingredient.

During the transition to the more restrictive labeling, existing products can continue to be used until the phase-out is complete. Other restrictions that are currently on the label, such as not to use in hospital rooms or closets of rooms where infants, children, and the sick

or aged are or will be present for any extended period of confinement, will remain on the label.

The EPA reminds consumers of the importance of reading and following all label directions to ensure pesticide products are used correctly. The pest strips are sold as Alco® No-Pest Strip, AMVAC Insect Strip, Alco® Pest Strip, AMVAC No-Pest Strip and Swat Pest Strip. Additionally, the manufacturer is voluntarily deleting other uses of DDVP including:

- mushroom house hand held fogger
- greenhouse hand held fogger
- warehouse hand held fogger
- total release fogger
- lawn, turf/ornamental and crack/crevice

The company has also requested label amendments to increase worker protection for the mushroom and greenhouse uses. As part of the standard regulatory process, the EPA will publish the proposed changes and its revised risk assessment for DDVP for public comment before issuing a final decision. DDVP will also be included in the organophosphate cumulative risk assessment, which will be issued during the summer of 2006.

The following is the Timeline for certain requirements regarding the Pest Strips:

- **April 15, 2007** (or 4 months after EPA approves new labels, whichever is later) – Registrant must stop sale of products with old labels to distributors and end use registrants.
- **December 31, 2007** – Last day distributors can sell pest strips with old labels.
- **January 1, 2008** – Registrant and distributors may sell pest strips with new labels only.
- **January 1, 2008** – Registrant begins reclaiming from distributors pest strip products with old labels. Retailers may sell pest strips until stock is exhausted.

References: (1) EPA's News Release:

<http://www.epa.gov/newsroom/newsreleases.htm> May 16, 2006

(2) "Controversial Insecticide Allowed to Stay on Market", <http://www.latimes.com/news/local/la-me-pesticide17may17.0,4146100.story> Los Angeles Times, May 17, 2006.

First Printers for New Hazardous Waste Manifests Approved

By Tom McCarley, Chemist, HTIS

Two companies J.J. Keller and Associates, Inc. and The Flesh Company are the first printers of the new uniform hazardous waste manifest to be approved under the new manifest printer rules. The approval dates were May 16 and 18, 2006 respectively and as of mid-May, 19 printers had submitted initial applications to the EPA for approval to provide manifests with unique tracking numbers and a unique printer suffix. Most of the printers have indicated that they will sell manifests to the general public, however, some will provide manifests only to a dedicated company.

J.J. Keller can be reached at 1-877-564-2333 or online at <http://www.jjkeller.com/>. The Flesh Company will sell manifests through distributors; call 1-800-745-7910 for further information.

The EPA finalized its new manifest requirements on March 4, 2005 after a four year effort at modernizing the manifest system and providing a more uniform system from state to state. Work on an electronic manifest ("e-manifest")

system has been deferred to later.

The new manifest system eliminates optional fields (field like waste code and waste handling code will now be mandatory. New fields call for the generator address and emergency response telephone number, among others.

The deadline for using manifest provided by approved printers is **September 5, 2006**.

The evolving list of approved printers will be maintained by the EPA at <http://www.epa.gov/epaoswer/hazwaste/gener/manifest/registry/printers.htm>

Reference: EPA Approved Hazardous Waste Manifest Printers at <http://www.epa.gov/epaoswer/hazwaste/gener/manifest/registry/printers.htm>



This bulletin is printed on recycled paper

e-Cycling A New Path For Electronics

By Angela Neville, JD, REM



In the past, electronics typically began their lives in manufacturing facilities and ended them in landfills -- their version of going from womb to tomb. However, because the volume of discarded computers, cell phones, televisions, and other electronic gadgets has exploded in recent years, there is a growing movement aimed at diverting electronic waste (e-waste) from landfills and giving it a new life through recycling.

The National Safety Council estimates that more than 500 million computers will need to be discarded between 1997 and 2007. The organization projects this will result in billions of pounds of plastic and lead being added to the waste that has to be managed in the United States. Along the same lines, the U.S. Environmental Protection Agency (EPA) estimates that

e-waste constitutes 40 percent of the lead and 70 percent of the heavy metals that are found in our landfills. The agency also emphasizes that, if landfilled e-waste is not handled properly, it could be released into the environment and contaminate our air and groundwater. Possible human health impacts include damage to kidney, brain, and nervous system functions and cancer in cases of excessive exposure.

In October 2005, the National Recycling Coalition (NRC) urged that electronics collected in the aftermath of Hurricanes Katrina and Rita be recycled or reused instead of being placed in landfills. NRC asserts that if the electronics collected during the recovery efforts cannot be recycled or reused, they should be disposed of in special landfills designed to handle hazardous waste. For more information about NRC's positions concerning e-waste, go to (www.nrc-recycle.org).

Solid waste industry members from the Solid Waste Association of North America (SWANA) and the National Solid Wastes Management Association (NSWMA) take exception to the positions of the EPA and many environmental groups that e-waste could harm human health and the environment when it is placed in landfills. SWANA

and NSWMA representatives argue there is no strong evidence that toxic substances leach from e-waste when it is placed in Subtitle D landfills, which are the sites designed for the disposal of nonhazardous waste.

Despite SWANA and NSWMA's assurances that landfilling e-waste is safe, elected officials at the state and federal levels are trying to pass laws restricting the disposal of e-waste. For example, recently California, Maine, Massachusetts, and certain areas in Washington state banned the disposal of particular types of e-waste in landfills. Last year, several U.S. representatives and senators initiated bills aimed at creating a national system for recycling e-waste.

Introduced in the U.S. House of Representatives in January 2005, the National Computer Recycling Act (H.R. 425) seeks to establish a grant and fee program through the EPA to promote the development of a national infrastructure for the recycling of used computers. The Electronic Waste Recycling Promotion and Consumer Protection Act (S. 510) was introduced in the U.S. Senate in March 2005 and the House introduced their version of this bill (H.R. 4316) in November 2005, which includes a tax credit for recycling electronic waste. To access these bills, visit the Library

of Congress's Web site at <http://thomas.loc.gov>.

Leading the way in dealing with this growing challenge, Japan and the European Union have adopted aggressive e-cycling laws. The European parliament recently approved a legislative mandate to require electronics manufacturers to cover the recycling and collection costs for their own take-back programs. European's Restriction of the Use of Certain Hazardous Substances in Electrical and Electronics Equipment Directive, known as the RoHS Directive, is setting the global standard for computer recycling. The RoHS Directive bans lead, mercury, cadmium, hexavalent chromium, and certain other substances above specific levels from electronic equipment sold in Europe. It goes into effect on July 1. To access more information about the RoHS Directive, visit (www.netregs.gov.uk).

In the absence of a federal law that mandates e-cycling, the EPA has launched a new voluntary initiative to promote the recycling and reuse of electronics. Through the agency's Plug-In Program (www.epa.gov/plugin), a large number of manufacturers and retailers are working together to raise public awareness of

electronics reuse and recycling and to create more take-back opportunities for consumers and businesses. On January 6, the EPA announced that its collaboration with its 21 Plug-In Partners over the past three years has resulted in the safe recycling of more than 60 million pounds of electronics.

It's become obvious that our new digital world has a dark side. Our elected officials need to take action now to pass strong laws promoting the management of e-waste before our country becomes one giant e-scrap heap.

Reference: Environmental Protection, Vol. 17, No. 3, Page 6, April 2006.

EPA Establishes a New Voluntary Standard for Computer Buyers

By Abdul H. Khalid
Chemical Engineer, HTIS

In a May 10, 2006, news release the U. S. Environmental Protection Agency (EPA) announced establishing "a new voluntary performance standard" that would help large computer buyers make environmentally sound purchases. The standard will help purchasers reduce the environmental impact of desktop and laptop

computers and monitors they buy, use and discard. According to the EPA, this standard will help computer buyers to protect environment and public health. It provides relief from the environmental impact of desktop and laptop computers and monitors bought, used, and discarded.

The new standard offers the following eight performance categories:

- Material selection,
- Environmentally sensitive materials,
- Design for end of life,
- End-of-life management,
- Energy conservation,
- Product longevity and life-cycle extension,
- Packaging, and
- Corporate performance.

The new standard is the Institute for Electrical and Electronics Engineers Standards Association (IEEE) 1680TM "Standard for Environmental Assessment of Personal Computer Products." The IEEE is a non-profit organization of the world's leading professional association for the

advancement of technology. IEEE 1680 and its product registration and verification system are part of the Electronic Products Environmental Assessment Tool (EPEAT), a project funded through a grant by the EPA and managed by the Green Electronics Council (GEC). EPEAT promotes continuous improvement in the environmental design of electronic products and informs purchasers of the environmental criteria of electronic products.

Representatives from state and local government, the electronics industry, manufacturers, academia environmentalists, and purchasers, developed the new standard with EPA support. The standard was approved through the IEEE standards consensus-based process and recognized by the American National Standards Institute. **Starting in June 2006**, the GEC will maintain a registry of computer products that meet IEEE 1680 criteria. The GEC will verify that the information provided by manufacturers is accurate and up-to-date.

The Electronic Product Environmental Assessment Tool is an environmental procurement tool designed to help institutional purchasers in the public and private sectors to evaluate, compare and select computer desktops, laptops and

monitors based on their environmental attributes. Once this standard is implemented, it will reduce million pounds of hazardous waste, non-hazardous waste, and energy over the next five years. Electronic products may contain heavy metals such as lead and low concentrations of mercury, cadmium and arsenic that are harmful and pose risks to human health and the environment.

For more information on EPEAT, DOD personnel can visit the EPA's web site at: <http://www.epa.gov/epp/pubs/products/epeat.htm>

Reference: "First U.S. Voluntary Standard for Computers in Place" May 10, 2005 at: <http://www.epa.gov/epp/pubs/products/epeat.htm>

SAICM Adopted

By Tom McCarley and Abdul Khalid, HTIS

On February 6, 2006, the International Conference on Chemicals Management held in Dubai adopted the "Strategic Approach to International Chemicals Management" (SAICM). SAICM is intended to recognize the vital role chemicals play in modern society that contribute towards higher standards of living while also looking at the management of risks to

public health and the environment that those chemicals can pose when being moved across borders, stored, and used. Unlike other binding treaties developed under the auspices of the United Nations Environmental Program (UNEP), SAICM is more of a voluntary approach intended to aid, primarily, developing countries in their development and implementation of sound chemical management regulatory programs.

The SAICM web site is at <http://www.chem.unep.ch/saicm/> and a document with the pre-publication text of the SAICM framework documents can be accessed there. Three SAICM framework documents are:

"The Dubai Declaration, which expresses the commitment to SAICM by Ministers, heads of delegation and representatives of civil society and the private sector.

The Overarching Policy Strategy, which sets out the scope of SAICM, the needs it addresses and objectives for risk reduction, knowledge and information, governance, capacity-building and technical cooperation and illegal international traffic, as well as underlying principles and financial and institutional arrangements. The ICCM

adopted the Overarching Policy Strategy which together with the Dubai Declaration constitutes a firm commitment to SAICM and its implementation.

A Global Plan of Action, which sets out proposed “work areas and activities” for implementation of the Strategic Approach. The ICCM recommended the use and further development of the Global Plan of Action as a working tool and guidance document”

The latest information on SAICM can be found at <http://www.chem.unep.ch/ICCM/ICCM.htm>

Several industry representatives at a recently held public meeting on the US position on SAICM expressed the concern that while SAICM is intended to be voluntary, the “voluntary” is whether or not a country adopts it. Once a country implements it, rules and regulations, which are *not* voluntary on industry, will flow forward in that country.

Just how the SAICM program will eventually affect DOD OCONUS operations remains to be seen as implementation certainly won't be immediate. Stay tuned.

References: 1. SAICM Web site at <http://www.chem.unep.ch/saicm> 2. EPA/State

Department Public Meeting on the US position on SAICM – January 17, 2006. 3. Presentations at the 230th American Chemical Society national meeting, Washington, D.C., August 2005

Sealift Cargo Industry, Primary Issues of Concern

By Thomas W. McElwee Jr., Environmental Protection Specialist, HTIS

The advent of container shipping in the sealift cargo industry has heralded a massive change in the efficiency of cargo handling. From its beginnings (1959) thru when container shipping became well established (1976) the tonnage handled per man hour has been greatly increased (0.627 tons per M/H vs. 4234 tons per M/H) and a ship's time in port has been greatly reduced (504 hours vs. 18 hours).

Container shipping did not come about without bringing with it, its own special needs and limitations. Additional requirements for specialized equipment, personnel training and management control at the shipping dock were mandated, consequently reducing some of the savings realized by its implementation.

Containers packed for vessel shipment generally must

comply with International Maritime Dangerous Goods (IMDG) Rules, U.S. domestic hazmat rules, Code of Federal Regulations, Title 49 (49 CFR) and a variety of other security rules and issues. **Security and improper packing of containers are seen by the operators as their primary issues of concern.**

CTU Packing

Vessel freight shippers need to pack cargo transport units (CTU) appropriately for both domestic transport by highway and international vessel transport. Many shippers simply aren't aware of the issues faced in vessel transportation. As a result, it is not uncommon for shipments to be rejected or delayed at the dock due to incompatibilities or improper packing, blocking and bracing.

The three primary concerns in packing a cargo transport units:

1. **Segregation:** Are each of the materials in the CTU compatible with one another and able to be stowed in the same location on a ship?
2. **Packing:** Is the material within the weight limits of the CTU? Is the weight properly distributed? Are the packages

secured sufficiently for ocean travel? Are hazmat packages accessible in an emergency?

3. **Communications:** Is the CTU itself properly marked and placarded to communicate its contents?

Guidance on packing cargo for vessel transportation is found in The International Maritime Organization's (IMO) IMDG Code with the enforceable rules being listed in:

Chapters 5.1 (general), 5.3 (marking & placarding), and 7.2 (segregation) and 7.5 (loading) of the International Maritime Dangerous Goods [IMDG code](#)

"Guidelines for Packing Cargo Transport Units (CTUs)" in the [IMDG Code Supplement](#).

IMO's Code of Safe Practice for Cargo Stowing & Securing ([CSS Code](#)),

CTU Security

Hazmat security is regulated in two ways, by two different agencies the Department of Transportation (DOT) and the U.S. Coast Guard

(USCG). Port security is subject to mandatory international standards. Port and vessel security is subject to the International Ship and Port Facility Security Code ([ISPS Code](#)). The ISPS Code is enforced by the U.S. Coast Guard under [33 CFR Parts 101-106](#). Under the same Coast Guard rules, the United States requires formal notification of inbound hazmat shipments to be made at least 24 hours before the goods are loaded on the ship *in the foreign port*. In some cases this notification must be made electronically.

DOT requires domestic hazmat shippers and carriers to develop independent cargo security plans. [See [40 CFR 172, Subpart I](#).]

These two sets of rules do not always integrate well. Integration of the two mandated security plans can be fraught with challenge.

Port operators and shippers can expect only increased security regulation over the near term. New developments are likely to be driven by technology. U.S. Customs is already moving toward electronic clearance. Hazmat communications are likely to follow with electronic waybills and RFID (radio frequency identification devices) providing hazmat information on every CTU and perhaps every package.

International harmonization continues to evolve with hazmat transportation already ahead of other areas. Over the past five years, more change in U.S. hazmat regulation has been driven by harmonization than by any other single issue.

Military shippers who prepare CTUs for vessel shipment must be aware of packing and security issues affecting material during transport to the port and aboard vessels. Failure to comply will result in badly needed materials being delayed or frustrated at the port.

References: 1. "A Sea Change In Shipping," San Francisco Chronicle, February 5, 2006] Lion Technology INC., NewsInfo Links, 28 Feb 2006. 2. Code of Federal Regulations, Title 49 (49 CFR). 3. [40 CFR 172, Subpart I](#), [33 CFR Parts 101-106](#). 4. International Ship and Port Facility Security Code ([ISPS Code](#)) Sealift cargo industry. Doc 3-1-06

MSHA Publishes Final Rule on Diesel Particulate Matter

By Abdul H. Khalid,
Chemical Engineer, HTIS

The U.S. Department of Labor (DOL)'s Mine Safety and Health Administration

(MSHA) issued a final rule on May 18, 2006 in the Federal Register, thereby increasing protections for miners exposed to diesel particulate matter (DPM) from diesel exhaust in underground metal and nonmetal mines.

According to the, exposure to DPM is a significant public health concern, and underground miners are exposed to higher concentrations of DPM than any other occupational group. This final rule provides more protection for miners from the effects of diesel particulate matter.

Diesel particulate matter consists of tiny particles present in diesel engine exhaust that can readily penetrate into the deepest recesses of the lungs. The confined underground mine work environment may contribute to significant concentrations of particles produced by equipment used in the mine. The final rule phases in the DPM final limit of 160 micrograms of total carbon per cubic meter of air over a 2-year period, based on technological feasibility information in the record:

- On May 20, 2006, the first phase of the final limit of 308 micrograms of elemental carbon will become effective.

- On Jan. 20, 2007, the DPM limit will be reduced to 350 micrograms of total carbon per cubic meter of air.
- On May 20, 2008, the final limit of 160 micrograms of total carbon per cubic meter of air will become effective. Mine operators will continue to use engineering and administrative controls, supplemented by respiratory protection when needed, to reduce miners' exposures to the prescribed limits. The final limit will be enforced as permissible exposure limits (PEL).

Also, this final rule establishes new requirements for medical evaluation of miners required to wear respiratory protection, and transfer of miners who are medically unable to wear a respirator. It deletes the existing provision that restricts newer mines from applying for an extension of time in which to meet the final concentration limit.

On January 19, 2001, MSHA first issued a rule establishing DPM exposure

limits. Under the 2001 rule, an interim DPM concentration limit of 400 micrograms of total carbon per cubic meter of air was to become effective on July 20, 2002, followed by a final concentration limit of 160 microgram per cubic meter on Jan. 20, 2006. MSHA issued a rule on June 6, 2005, converting the interim DPM concentration limit of 400TC (total carbon) to a comparable limit of 308ec (elemental carbon), which reflects a more accurate DPM exposure measurement. On Sept. 7, 2005, MSHA proposed a new rule revising the phase-in of the final DPM limit because of concern over mine operators' ability to meet the January 2006 deadline. MSHA also plans to initiate a separate rulemaking to convert the 350 and 160 total carbon DPM limits to elemental carbon limits.

This final rule became effective on May 18, 2006, except for Amendments to Sec. 57.5060 (d), which is effective August 16, 2006.

For more information on this final rule, POC is Patricia W. Silvey, Acting Director, Office of Standards, Regulations, and Variances, MSHA, 1100 Wilson Blvd., Room 2350, Arlington, Virginia 22209-3939, phone: 202-693-9440 or FAX 202-693-9441. The final rule, Diesel Particulate Matter Exposure of Underground

Metal and Nonmetal Miners is available via GPO web site at:

<http://a257.g.akamaitech.net/7/257/2422/01jan20061800/e.docket.access.gpo.gov/2006/06-4494.htm>.

Reference: Federal Register, May 18, 2006, Vol. 71, No.96, pages- 28923-29012.

DOT's PHMSA Harmonizes U.S. Infectious Substances Rules with U.N. Recommendations

By Abdul H. Khalid,
Chemical Engineer, HTIS

On June 2, 2006, the Department of Transportation (DOT)'s Pipeline and Hazardous Materials Safety Administration (PHMSA) announced that the agency has revised the transportation requirements for infectious substances, including regulated medical waste, to adopt new classification criteria, new exceptions, and packaging and hazard communication requirements consistent with revised international standards to clarify existing requirements to promote compliance.

According to PHMSA, these revisions will ensure an acceptable level of safety for the transportation of infectious substances and

facilitate better domestic and international transportation.

The final rule is effective on **October 1, 2006** and classifies infectious substances into a "Category A" higher-risk group or a "Category B" lower-risk group consistent with those in the U.N. recommendations and International Civil Aviation Organization (ICAO) Technical Instructions.

Category A substances are subject to tougher packaging and package-testing requirements, as under U.N. model rules. The transportation requirements include watertight packaging, rigid and temperature-resistant outer packaging, and appropriate shipping papers. **Carriers and shippers are authorized to comply with the final rule within 30 days of the rule, beginning July 3, 2006.**

The full text document is available at:
<http://a257.g.akamaitech.net/7/257/2422/01jan20061800/e.docket.access.gpo.gov/2006/06-4992.htm>.

For further information or clarification on this rule, DOD personnel can contact Eileen Edmonson, Office of Hazardous Materials Standards, phone: 202- 366-8553, PHMSA, U.S. DOT or e-mail at:

Eileen.Edmonson@dot.gov
or infocntr@dot.gov.

Reference: Federal Register, June 2, 2006 (Vol. 71, No. 106, pages- 32243-32263).

EPA High Production Volume Chemicals Information System

By Tom McCarley, Chemist,
HTIS

In it's continuing effort to expand the Public's right to know on chemicals, the EPA has been working for over 15 years to develop a dataset of basic health and related data on those chemicals whose production or import volumes exceeds 1 million pounds per year. These million pound plus chemicals are called **High Production Volume (HPV)** chemicals and users of the data can now access information on their favorite HPV chemical via the High Production Volume Information System (HPVIS). HPVIS, on website <http://www.epa.gov/hpvis/> can be searched by either Chemical Abstracts Service (CAS) number or partial chemical name.

There are about 2800 such substances and the EPA is looking for some 50 pieces

of data called endpoints in the following areas:

- Physical/chemical properties (e.g., melting point, vapor pressure)
- Environmental fate and pathways (e.g., biodegradation, stability in soil)
- Ecotoxicity (e.g., fish toxicity, toxicity to terrestrial plants)
- Mammalian health effects (e.g., reproductive toxicity, developmental toxicity)

About 2200 of the 2800 chemicals in the HPV program have some data visible in HPVIS.

The original 1990 HPV chemical list can be viewed at http://www.epa.gov/chemrtk/hpv_1990.pdf with 1994 additions at http://www.epa.gov/chemrtk/hpv_1994.pdf. Additional chemicals are being considered for the program as well.

In the EPA's initial survey on data availability, they were surprised to find that the full set of data on many of the endpoints they were seeking existed for fewer than 10% of the HPV chemicals and nearly half of the substances had none of

the data available in the late 1990s. Data on acute toxicity is more common; long term chronic information is much more difficult to obtain.

The HPV program at the EPA and access to data is likely to receive increased attention with the focus nowadays on chemical plant security and emergency planning for dealing with a catastrophic chemical plant or chemical transport incident.

References. 1. EPA's High Production Volume Chemicals initiative at <http://www.epa.gov/chemrtk>
2. High Production Volume Information System (HPVIS) at <http://www.epa.gov/hpvis/>

EPA Releases Handbook for Drinking Water Security Systems, First Responders

Reprint submitted by Fred Tramontin

On May 26, the EPA announced the release of a handbook, "*Water Security Handbook: Planning for and Responding to Drinking Water Contamination Threats and Incidents*", that will help operators of drinking water systems understand the basics of planning for and responding

to threatened or actual incidents.

The handbook, a simplified version of the *Response Protocol Toolbox: Planning for and Responding to Drinking Water Contamination Threats and Incidents*, covers the overall concepts and principals in less detail than the full version. The handbook is also intended to be a companion to EPA's *Response Protocol Toolbox: Planning for and Responding to Drinking Water Contamination Threats and Incidents: Response Guidelines*. The *Response Guidelines* provides many forms and checklists to help organize and carry out emergency response and planning efforts. The handbook describes the basic concepts and procedures involved in water security planning and threat response.

The handbook describes how to recognize intentional water contamination threats and incidents, what actions a utility should take in the event of a threat or incident, possible roles of the water utility within the larger Incident Command framework, and how the National Incident Management System is organized. It also describes the utility's actions and decisions during site characterization, laboratory analysis, public health

response, remediation and recovery.

EPA officials said the handbook was written for water system owners and managers, water utility emergency response managers (WUERM)s, and utility staff who maintain public and private drinking water systems, regardless of their size. In addition, anyone who may be involved in an emergency response concerning drinking water, such as public health officials, emergency responders, law enforcement officials, environmental protection officials and other government officials should read the handbook. Utility managers in the wastewater sector may find the handbook useful because it describes a general process for threat and incident response.

The handbook can be accessed through web site http://www.epa.gov/safewater/watersecurity/pubs/water_security_handbook_rptb.pdf. Information on water security can be found at <http://www.epa.gov/safewater/watersecurity>.

Reference:

<http://www.stevenspublishing.com/Stevens/WWPPub.nsf/frame?open&redirect=http://www.stevenspublishing.com/stevens/wwppub.nsf/d3d5b4f938b22b6e8625670c006dbc58/6260193d0962909f86257>

[17f005c7bc7?OpenDocument](http://www.epa.gov/safewater/watersecurity/pubs/water_security_handbook_rptb.pdf)

EPA Finalizes RCRA Burden Reduction Initiative

By Tom McCarley, Chemist, HTIS

Those who have worked with hazardous waste regulations for any length of time certainly know that compliance is expensive and time-consuming. For some time, the Environmental Protection Agency (EPA) has been looking for ways to streamline regulatory compliance under the Resource Conservation and Recovery Act (RCRA) without sacrificing their goals of protecting human health and the environment.

In the Federal Register for April 4, 2006, the EPA announced a number of changes to the regulations under the concept of RCRA Burden Reduction Initiative. In a 55 page final rule, the following changes are implemented and became effective May 4, 2006:

A. Changes to the amount of time records must be kept

- Reducing the retention time for certain information kept in a facility's operating record but increasing the

retention time for certain information kept in an interim status facility's operating record and

- Establishing a five year record retention time for information kept on the operation of incinerators, boilers, and industrial furnaces.

B. Changes to the professional engineer certification requirements

- Removing the "Independent and Registered" requirements for selected certifications and
- Changing the closure and post-closure certification requirements.

C. Owners and operators of hazardous waste treatment, storage, and disposal facilities have an option of following the integrated contingency plan guidance.

D. Owners and operators of hazardous waste treatment, storage, and disposal facilities have an option to follow the RCRA or equivalent Occupational Safety and health Administration (OSHA) Standard for Emergency Response Training.

E. Clarifying selected requirements under RCRA's land disposal restrictions and eliminating obsolete regulatory language

- Clarifying the regulatory language on the land disposal restrictions generator waste determination,
- Clarifying the regulatory language on the land disposal restrictions characteristic waste determination, and
- Removing obsolete regulatory language.

F. Eliminating selected recordkeeping and reporting requirements that we believe provide duplicative information to EPA

- Eliminating the requirement for facilities to notify that they are in compliance after a release,
- Eliminating the requirement for facilities to notify of their intent to burn F020, F021, F022, F023, F026, and F027 wastes,
- Eliminating the requirement for facilities to notify if they employ or discontinue use of the alternative valve standard, and

- Eliminating the requirement for facilities to notify if they are using alternative valve work practices.

G. Decreased inspection frequency for certain hazardous waste management units

- Establishing weekly inspections for certain hazardous waste tank systems at permitted and interim status facilities, and at large quantity generator sites,
- Establishing weekly inspections for small quantity generator (SQG) hazardous waste tanks systems with secondary containment, and
- Allowing members of the national environmental performance track program to apply for an adjustment to the frequency of their inspections for certain hazardous waste management units and areas.

Performance Track: Reduced inspection frequency for areas subject to spills.

Performance Track: Reduced inspection frequency for containers.

Performance Track: Reduced inspection frequency for tank systems.

Performance Track: Reduced inspection frequency for containment buildings.

H. selected changes to the requirements for record retention and submittal of records

- Removing the requirement to submit a one-time notification for recycled wood wastewater and spent wood-preserving solutions and clarifying an unintentional elimination made in the proposal,
- Eliminating the requirement for interim status facilities to submit specific ground-water monitoring plans and ground-water assessment reports,
- Eliminating the requirement for interim status surface impoundments, waste piles, and landfills to submit a response action plan,
- Eliminating the requirement for facilities to submit a tank system certification of

completion of major repairs,

- Eliminating the requirement for a recycler to submit a notification and certification, and
- Eliminating the requirement to submit a land disposal (LDR) restriction notification and certification.

I. Selected changes to the requirements for document submittal

- Streamlining the procedure for obtaining a variance from classification as a solid waste,
- Streamlining the requirements for treatability study reports for testing facilities, and
- Streamlining the requirements for ground-water monitoring.

J. Selected changes to the requirements for semi-annual reports to annual reports

- Changing the requirement for a semi-annual report detailing the effectiveness of the corrective action program and

- Changing the requirement for a semi-annual report detailing the progress of the corrective action program.

Since any number of our military installations use tanks for hazardous waste accumulation or storage, the change from daily to weekly inspections is welcome but only applies to the above ground portion of the tank where any releases can be readily detected and to the construction material (dike, berm, etc.) immediately surrounding the externally accessible portion of the tank system. The EPA imposes two conditions for the reduced inspection schedule (either must be met but not both since they are exclusive): Tank owners and operators employ leak detection equipment; or in the absence of leak detection equipment, tank owners and operators employ established workplace practices that ensure that when any leaks or spills occur, they will be promptly identified, and promptly remediated.

Another change to note above is the elimination of the need to send the land disposal restriction (LDR) notification and certification to the EPA or authorized State when characteristic wastes (waste codes D001-D043) have been treated so they no longer meet the

characteristic. Notification and certification will still need to be kept as records maintained at your installation.

The EPA estimates a cost savings to States and the regulated community of \$2-3 million based on a total time savings of up to 37,500 hours per year.

Reference: Federal Register, vol. 71, No. 64, pp16862-16915, April 4, 2006.

OSHA's Best Practices Guide to Developing Workplace First Aid Programs

By Ariel Rosa,
Environmental Protection
Specialist, HTIS

A workplace first-aid program is part of a comprehensive safety and health management system that includes the following four essential elements:

- Management Leadership and Employee Involvement
- Worksite Analysis
- Hazard Prevention and Control
- Safety and Health Training

The OSHA's *Best Practices Guide: Fundamentals of a Workplace First-Aid Program* identifies the basic elements of a first-aid program in the workplace. Those elements include:

- Identifying and assessing workplace risks.
- Designing a program that

Aims to minimize the outcome of accidents or exposures.

Complies with OSHA requirements relating to first aid.

Includes sufficient quantities of appropriate and readily accessible first-aid supplies and first-aid equipment, such as bandages and automated external defibrillators.

- Assigns and trains first-aid providers who:

Receive first-aid training suitable to the specific workplace and

Receive periodic refresher courses on first-aid skills and knowledge.

- Instructing all workers about the program, including what to do if a coworker is injured or ill. Policies, procedures and program should be in writing and

communicated to all employees.

- Evaluating and modifying program to keep it current, including regular assessment of the first-aid training course.

The guide recommends that in the planning stage employers review their OSHA 300 logs, OSHA 301 forms, and workers' compensation carrier reports, to help identify the first-aid needs for their businesses.

The guide also includes best practices for planning and conducting effective first-aid training and steps to be taken in preparation for health emergencies, life-threatening emergencies, and non-life-threatening emergencies. OSHA recommends that first-aid training include instruction in general and workplace hazard-specific knowledge and skills. If Automated External Defibrillators (AED) are available AED training should be incorporated with Cardiopulmonary Resuscitation, CPR training.

There were 5,703 work-related fatalities in private industries in 2004. In that same year there were 4.3 million total workplace injuries and illness, of which 1.3 million resulted in days away from work.

Occupational illness and fatalities in 2004 cost the United States' economy \$142.2 billion, according to National Safety Council estimates. The average cost per occupational fatality in 2004 exceeded one million dollars.

Reference:

<http://www.osha.gov/Publications/OSHA3317first-aid.pdf>

NEHC-TM-OEM 6260.01A

By Beverly Howell,
Industrial Hygienist, HTIS

The Navy Environmental Health Center (NEHC) has published Technical Manual NEHC-TM-OEM 6260.01A, April 2006, "Reproductive and Developmental Hazards: A Guide for Occupational Health Professionals". This manual is an updated edition of the original Tech Manual, enhanced with an expanded list of chemical hazards as well as the inclusion of a concise listing of chemical, biological, and physical reproductive hazards.

The updated manual is designed to enhance usefulness, especially to field industrial hygienists.

Reference: <http://www-nehc.med.navy.mil/occmed/fpfiles.htm#ReproManual>

IRRATA

HTIS regrets that erroneous information was included in the article **“Heads-Up on Transition Dates”** published in VOL. 16 NO. 3 of the May-Jun 2006, HTIS Bulletin. In the article, the paragraph **Poison Placard** erroneously reads, “Beginning October 1, 2005 all 6.1 poison inhalation hazards are considered Table 1 materials as indicated in the

placarding requirements at 49 CFR 172.504(e). That means any non-bulk package with any 6.1 poison inhalation hazard will not require placards.” The correct paragraph should have read, “Beginning October 1, 2005 all 6.1 poison inhalation hazards are considered Table 1 materials as indicated in the placarding requirements at 49 CFR 172.504(e). *This eliminates the exception for PIH materials of*

less than 454 kg that could be applied to PIH when it was listed in table 2. This means that any non-bulk package with any 6.1 poison inhalation hazard must be placarded with a PIH placard unless the material is *being shipped domestically* and is already placarded with *6.1 Poison placards.*”

**Defense Supply Center Richmond
8000 Jefferson Davis Highway
Richmond, Virginia 23297-5609**

**PRE-SORTED STANDARD
U.S. POSTAGE PAID
TEMPLE HILLS, MD
PERMIT NO. 4004**

The HTIS Bulletin is produced bimonthly.

Correspondence should be addressed to Defense Supply Center Richmond, DSCR-VBC, 8000 Jefferson Davis Highway, Richmond, VA 23297.5609 or call DSN 695.5168, Commercial 804.279.5168, or Toll Free 800.848.HTIS. Our Fax is 804.279.4194. We can also be reached by e-mail at

htis@dscr.dla.mil or on the Internet at <http://www.dscr.dla.mil/htis/htis.htm>.

Commander, Defense Supply Center Richmond
RADM Mark F. Heinrich, USN

Director, Aviation Engineering
B. Montague Ingram

Chief, Hazardous Information Programs Division
A. J. Kendrick

Chief, Hazardous Technical Information Services Branch
Fred J. Tramontin, Ph.D.

HTIS Bulletin Technical Advisor
Fred J. Tramontin, Ph.D.

Editor, HTIS Bulletin
Leonard S. Lambert

If you are presently on our mailing list and wish to make a change, please include your complete current mailing address along with your change of address in your notice to us. No special permission is required to quote or reproduce articles written by the HTIS Staff. However, proper credit would be appreciated.